



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/863,181   | 05/23/2001  | William A. Cox       | CWL-101-A           | 9646             |
| 7590   | 01/18/2006  |                      | EXAMINER            |                  |
| Andrew R. Baslie<br>Young & Baslie, P.C.<br>Suite 624<br>3001 West Big Beaver Road<br>Troy, MI 48084 |             |                      | PETERSON, KENNETH E |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3724                |                  |
| DATE MAILED: 01/18/2006  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/863,181             | COX, WILLIAM A.     |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Kenneth E. Peterson    | 3724                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 July 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-13,15-17,37,39,40,46-50 and 52-59 is/are pending in the application.
- 4a) Of the above claim(s) 3-12,37,39,40,46 and 48 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,13,15-17,47,49,50 and 52-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 July 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

Art Unit: 3724

1. The amendment filed 19 July 05 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In claims 1, 13,16,47,55,57,58 and 59, the first die support provides "sole rolling engagement" with the 1<sup>st</sup> die and "solely maintaining" the first die in position. No support can be found for this in the specification as originally filed. In the horizontally transverse direction and the longitudinal direction, and in the upward direction, the upper die plays a part in preventing motion. Also, for the embodiment of figures 7-9, the bearing supports clearly have some effect on the engaging and position maintenance of the dies. Also, in the embodiment of figure 2, the belt 146 also constrains the rolling and positioning of the dies. To sum, saying that the first die support provides "sole rolling engagement" and is "solely maintaining" the position is something that is new, because previously, there were also other elements that engaged and constrained the position.

In claims 47,54,55,56 and 57, there is claimed a rotary die apparatus that has both a hi-speed die set and a low-speed die set. Applicant's original specification does disclose a first embodiment (e.g. figure 1) that holds a low speed die set, and it does disclose a second embodiment that holds a hi-speed die set (e.g. figure 7-9). However, there is no disclosure of a single "rotary die apparatus" that has both a hi-speed die set and a low-speed die set, and thus this latest amendment is new matter. Applicant's disclosure comes closest in the last sentence of paragraph 0009, stating that parts can

be swapped, but never says that a single apparatus has both parts. See Examiner's response to arguments for more on this.

Applicant is required to cancel the new matter in the reply to this Office Action.

2. Claims 1,13,15-17,47,49,50 and 52-59 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as set forth above.
3. Claims 1,13,15-17,47,49,50 and 52-59 are objected to because of the following informalities:

All of these claims are titled a "rotary die apparatus" that is "*for use with a first rotary die*". However, the bodies of the claims recite the first rotary die in a way that it must be given positive weight. Since Examiner must now give full weight to the first rotary die, the invention is no longer just a "rotary die apparatus *for use with a first rotary die*", but instead is a "rotary die apparatus *having a first rotary die*".

On line 5 of claim 47, "rod" should be --column--.

Appropriate correction is required.

4. Claims 1,13,15-17,47,49,50 and 52-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 13,16,47,55,57,58 and 59, the first die support provides "sole rolling engagement" with the 1<sup>st</sup> die and "solely maintaining" the first die in position. However, the original specification reveals that in the horizontally transverse direction and the longitudinal direction and the upward direction, the upper die plays a part in preventing motion. There are other problems, as elaborated above in the new matter objection. Thus it is not clear what weight should be given to the term "sole". For this action, the term "sole" will be interpreted in light of the specification as meaning "partial".

In claims 1,13,47,55,58 and 59 is the phrase "independent of the columns". It is not clear what weight to give the term "independent", since Applicant's own die supports are not entirely "independent of the columns". For example, in the second embodiment (figures 7-9), die support elements 174 and 160 are held in place by the cross member 54, which is held in place by the columns. In the first embodiment, the columns hold the cross members, which hold the second die supports, which holds the second die, which in turns plays a part in maintaining the position of the first die. To sum, it cannot be said that maintaining the position of the first die is independent of the columns.

In claims 47,54,55,56 and 57, It is not clear which of two ways to interpret;

- A) an apparatus that is structurally capable of employing different die supports, or
- B) an apparatus and kit that *has* different die supports.

Art Unit: 3724

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,13,16,17,47,49,53,54 and 59, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Gautier '078, who shows a rotary die apparatus having all of the recited limitations including 4 columns (31), a base (12), a cap, a cross member (15), a first die support module having spaced bearings (13) fixed directly to the base (12A), a second die support module having spaced bearings (16), and a pressure device (21,22).

Just like Applicant's device, the bearings (13) provide all of the support in the vertical direction and provide some stability in both horizontal directions.

In regards to at least claims 47 and 54, the die supports are capable of being interchanged for high or low speed rotary die applications. They don't suggest doing so, but they are *capable* of doing so, since such devices are inherently built with maintenance in mind. Also, it is difficult to imagine why or how the bearings 44 of the die support would be permanently attached. Thus the die supports could be "interchanged" for duplicates once they wear out. Even though duplicates, they are capable of speeds both above and below 600 linear feet per minute.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1,13,16,17,47,49,53,54 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078.

If it is interpreted that Gautier's die supports are not "interchangeable" or "modules", then Examiner notes that it is old and well known for dies supports to be interchangeable modules. An example of this is the patent to Belongia '461, who shows die support modules (25) that are interchangeable (note removable bolts in figure 3). Additional examples can be provided if needed. It would have been obvious to one of ordinary skill in the art to have modified Gautier by making his die supports be interchangeable modules, as is well known and taught by Belongia, in order to be able to replace them when they wear out.

9. Claims 1,13,15-17,47,49,50 and 52-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078, as modified above or not.

In regards to at least claims 15,50,52 and 55-58, Gautier shows a die cutting apparatus with all of the recited limitations except for a set of radial flanges that engage the bearings (13) and the other die. However, it is old and well known for the bearing-die relationship to employ radial flanges to enhance longitudinal stability. An example of this is the patent to Keston '116, who shows radial flanges (88) on the bearing to prevent longitudinal motion of the rotary die. Additional examples can be provided. This simple teaching is applicable to any parts of the rotating dies, and of course, it is a

simple and obvious reversal of parts to have the radial flange on the die instead of the bearing or to have the flange on one die overlap another die. It would have been obvious to one of ordinary skill in the art to have modified Gautier by adding a radial flange to the dies that could laterally engage the bearings (13,16) and the opposing die, as is generically known and made obvious by Keston, in order to enhance longitudinal stability of the dies and thus make more accurate cuts in the workpiece.

In regards to at least claim 55, Gautier shows a bearing (4,3) that engages the journals (9,10), but does not state that these are "cylindrical roller bearings". Examiner takes Official Notice, and Applicant will agree, that such is well known. It would have been obvious to one of ordinary skill in the art to have made these bearings be cylindrical roller bearings, since that is the type of bearing that is most common in this type of device. Applicant has not challenged this taking of Official Notice, and it is now considered to be fact.

10. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues against the multiplicity rejection, noting that MPEP 607 permits 20 claims without additional fees and more than 20 if additional fees are paid. However, the multiplicity rejection has nothing to do with the fee structure. As set forth in 2173.05(n) the right to many claims "*should not be extended to sanction that degree of repetition and multiplicity which beclouds definition in a maze of confusion*". As seen above, this case is already quite complicated, so throwing in additional claims would likely becloud the issues and cause confusion.

It is noted that Applicant has removed the word “exclusive” but added the words “sole” and “independent” to the claims, and argues that there is now no new matter nor 112 issues. However, these problems still exist, as set forth above. Applicant has taken the tricky approach of using negative language. The terms “exclusive”, “sole” and “independent” all mean “without other elements” to certain extents. However, in this case there are other elements that (in arguably minor ways) constrain the position of the dies. By analogy, just because the floor is supporting the Examiner’s chair does not mean that the seated Examiner is not “maintaining” the chair’s position. Since negative language is so problematic in this case, Applicant may want to try sticking with just positive language in the future.

Applicant’s proposed new drawings are accepted.

Applicant has changed the titles of some of the claims, but they are still objected to because of the “for use” problem. Applicant has two choices here. The first choice is to change “for use with” to --having—and thus correctly reflecting the positive claiming of the dies. The second choice is to delete anything considered to be a positive recitation of the dies from the body of the claims. Examiner cannot let Applicant have his cake and eat it too, so one of the above two choices must be made for each claim. Note that recitations of dies within functional phrases are often still considered to be positive recitations if the claim scope is not understandable without the dies.

Applicant has changed at least claims 47 and 54 to refer to both embodiments of figure 1 and the embodiment of figure 7 as being part of a single apparatus, but there does not seem to be any support for this in the specification as originally filed. While

one of ordinary skill might understand a kit could be made from the two embodiments, such a kit is not disclosed. Further compounding the problem is that it is not clear if Applicant is actually claiming both embodiments, or if he is just claiming the *capability* of switching between embodiments.

Applicant's arguments against the prior art are moot in view of the myriad issues of scope indefiniteness. While the multitude of rejection above may seem excessive, it is important to note that Examiner is trying to help Applicant arrive at more clear and definite language so that legal issues do not arise at a later point. If claims like what currently exist were issued, Examiner deems that there would be nothing but legal woes for the assignee for years to come as potential infringers battle in the courts over the many possible meanings of the claims.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Peterson whose telephone number is 571-272-4512. The examiner can normally be reached Mon-Thurs, 7:30AM-5PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KP  
January 12, 2006

  
KENNETH E. PETERSON  
PRIMARY EXAMINER